



## The Correct Name for the Hawaiian Crow

by Richard C. Banks

Latham (1781) described the Tropic Crow from a specimen taken on Captain Cook's third and last voyage. The name *Corvus tropicus* was provided by Gmelin (1788), who based his description entirely on Latham. The provenance of the specimen named was ostensibly the island of O-why-hee, or Hawaii. As Stresemann (1950) and Medway (1981) have pointed out, specimens from Cook's last voyage were not labeled individually, and doubts as to their true origins and the identities of the species described from them arose almost immediately. Stresemann (1950) showed conclusively that the specimen described by Latham and named by Gmelin was actually an immature drongo, of the form now called *Dicrurus paradiseus formosus* Cabanis, 1851 (from Princes Island, west of Java), but he did not indicate what the crow on Hawaii should be called.

Blake and Vaurie (in Mayr and Greenway, 1962:278) used the name *Corvus tropicus* Kerr, 1792 for the Hawaiian Crow, giving *Corvus hawaiiensis* Peale, 1848 as a synonym. The epithet *hawaiiensis* had previously been used by several authors

who had doubted Latham and Gmelin and was given as the correct name by Medway (1981), who did not mention Kerr's name. The American Ornithologists' Union (1982) followed Blake and Vaurie (*op. cit.*) in the use of *Corvus tropicus* Kerr.

Kerr's 1792 "The Animal Kingdom..." was basically, as stated on its title page, "...a translation of that part of the Systema Naturae, as lately published, with great improvements, by Professor Gmelin of Goettingen" with some additions. Kerr's use of the name *Corvus tropicus* cites the "Tropic Raven" of Cook's last voyage and the "Tropic Crow" of Latham, and gives the number 33 that Gmelin had assigned to *tropicus* in his listing of the genus *Corvus*. It is clear that Kerr was merely repeating Gmelin's name, not creating a new one. His description, again based entirely on Latham per Gmelin, mentions that the sides of the body are spotted with white and makes it certain that the bird to which the name applies is not the crow in Hawaii, despite the statement that it "inhabits Owhyhee, one of the Sandwich islands."

There is no justification for attributing the name *Corvus tropicus* to Kerr, but if the name is attributed to him, it is an objective synonym of *Corvus tropicus* Gmelin and it is still a drongo, not the Hawaiian Crow. Because *Corvus tropicus* applies to another species, the correct scientific name for the Hawaiian Crow or Alala is, as Medway (1981) stated, *Corvus hawaiiensis* Peale, 1848.

### ACKNOWLEDGMENTS

Winston E. Banko queried me about the discrepancy in the current use of the two names, drawing my attention to this problem. W.E. Banko, George E. Watson and Burt L. Monroe read and commented on the manuscript.

### REFERENCES

- American Ornithologists' Union. 1982. Thirty-fourth supplement to the American Ornithologists' Union checklist of North American birds. Supplement to The Auk, Vol. 99, No. 3, July 1982.
- Gmelin, J.F. 1788. Systema naturae. 13th ed. Vol. I, pt. 1. Lugduni.
- Kerr, R. 1792. The animal kingdom.... I, pt. 2. Edinburgh.
- Latham, J. 1781. A general synopsis of birds. Vol. I, pt. 1. London.



Adult 'Alala perched on a Kawau tree (*Ilex anomala*) at 4900 ft. elevation, Hawaii Island. Circa June 1978.

Photo by Jon Giffin



- Mayr, E., and J.C. Greenway, Jr. eds. 1962. Check-list of birds of the world. Vol. XV. Museum of Comparative Zoology, Cambridge, Mass.
- Medway, D. G. 1981. The contribution of Cook's third voyage to the ornithology of the Hawaiian Islands. *Pacific Science* 35(2):105-175.
- Peale, T.R. 1848. United States Exploring Expedition. Vol. VIII. Mammalia and ornithology. C. Sherman, Philadelphia.
- Stresemann, E. 1950. Birds collected during Capt. James Cook's last expedition (1776-1780). *Auk* 67:66-88.

*U.S. Fish and Wildlife Service  
National Museum of Natural History  
Washington, D. C. 20560*

## THE DIVERSITY OF NESTING SITES UTILIZED BY THE 'APAPANE

by Howard F. Sakai

The 'Apapane (Himatione sanguinea), a Hawaiian honeycreeper, is a common resident of the wet, native ohia (Metrosideros collina) forests throughout Hawaii (Berger 1981). During the past 100 years, approximately 200 'Apapane nests have been found (Table 1). Besides the conventional stantant cup-shaped nest on a terminal branch, nests have also been reported from a wide variety of other locations. However, there is no published report of 'Apapane nesting in tree cavities. Previous reports of 'Apapane nest sites, coupled with the observations in this paper, confirm that this species uses a wider variety of nest sites than most other bird species in Hawaii.

Cavities, as defined by Pettingill (1970), are "caves, crevices, or holes in trees." Between 1975 and 1981, I found five pairs of 'Apapane using tree cavities for nest sites in forests on the island of Hawaii (Table 2). The only retrievable cavity nest measured 2 cm tall and its outside diameter varied from 5.0 to 5.4 cm (Fig. 1). This incomplete nest lacked a cup lining and contained a variety of materials from native plants (Table 3).

In May 1975, I discovered an 'Apapane pair dismantling a cavity nest. Within 3 days, the 'Apapane moved all of the nesting material to an ohia tree 15 m away. They used the material to construct a typical, cup-shaped nest on terminal twigs, 14 m up in a 17 m tree. It was impossible to as-

certain that these 'Apapane were the builders of the former nest, because neither bird was color-banded. Berger (1981) mentions that 'Apapane "often" dismantle nests, but did not mention whether they reuse the materials in constructing other nests. These unconventional 'Apapane nest builders can now be added to the list of other cavity nesters such as the Hawaiian Thrush (Phaeornis obscurus) (van Riper and Scott 1979), the endangered Hawaii Creeper (Oreomystis mana), 'Akiapola'au (Hemignathus munroi), and Hawaii 'Akepa (Loxops coccineus) (Scott et al. 1980).



FIGURE 1. 'Apapane cavity nest in the trunk of a leaning koa (Acacia koa) tree, in the Keauhou Ranch, island of Hawaii.

*Photo by Howard Sakai*

In terms of reproductive success, the 'Apapane which nest in cavities may have an advantage over conventional nesters, when one considers that some areas of Hawaii receive more than 8 m of rainfall per year. The wide variety of nesting locations utilized by the 'Apapane suggest that, during the evolution of this species, selective pressure for a specific nest site type may have been relaxed. The lack of ground predators prior to the arrival of Polynesians sometime between 500 to 750 A.D., may be an explanation for the great variety of nest sites used by 'Apapane. However, with the subsequent introduction of numerous ground predators to Hawaii, individuals nesting at low heights today would certainly be at a disadvantage. The 'Apapane's catholic taste in nest sites may also help explain the species' great abundance in Hawaii in that this species commonly reaches densities of 5 - 10 birds per ha in native rain forests (C. J. Ralph, pers. comm.).



TABLE 1. Reports of 'Apapane nest sites.

Observer	Sample size	Nest height (m)	Nest location	Nest substrate	Island
<u>High Nests</u>					
Henshaw (1902)	"many"	Tops of high trees (no heights given)	Terminal branches	<u>Metrosideros collina</u>	Hawaii
Perkins (1903)	"many"	Tall trees (no heights given)	Thin topmost branches	<u>Metrosideros collina</u>	Hawaii
Eddinger (1970)	67	6-13	Terminal branches	<u>Metrosideros collina</u>	Kauai
This study	11	8-15	Terminal branches	<u>Metrosideros collina</u>	Hawaii
This study	1	18	Terminal branches	<u>Acacia koa</u>	Hawaii
This study	1	12	Platform on broken large branch (40 cm diameter)	<u>Acacia koa</u>	Hawaii
<u>Low Nests</u>					
Munro (1944)	"a number"	2-4	Twig	<u>Metrosideros collina</u>	Lanai
Berger (1981)	4	3-4	Fronds	<u>Cibotium glaucum</u>	Hawaii
This study	4	3-4	Terminal branches	<u>Metrosideros</u>	Hawaii
This study	1	3	Terminal branches	<u>Ilex sandwicensis</u>	Hawaii
van Riper (1973)	1	2.5	Crevice in cave	Rock	Hawaii
T. Burr & A. Taylor (pers. comm.)	1	0.5	Rock rubble in cave	Rock	Hawaii



TABLE 2. 'Apapane tree-cavity nests found on the island of Hawaii.

	Nest				
	A	B	C	D	E
Date found	May 1975	April 1976	April 1977	April 1978	May 1978
Location	Keauhou Ranch	Keauhou Ranch	Keauhou Ranch	Keauhou Ranch	Honaunau Forest Reserve
Elevation (m)	1560	1565	1565	1550	1300
Tree	<u>Acacia koa</u>	<u>Acacia koa</u>	<u>Acacia koa</u>	<u>Acacia koa</u>	<u>Metrosideros collina</u>
Tree diameter at breast height (cm)	115	123	118	85	40
Tree height (m)	21	23	22	15	19
Nest height (m)	14	12	14	5	13
Cavity faces	East	North	Southeast	South	Southeast
Shape of cavity entrance	Oval	Linear-oval	Linear	Triangular	Oval
Final nest status	Built then abandoned	Fledged	Fledged	Built then abandoned	Unknown

TABLE 3. Materials used in the body of an 'Apapane cavity-built nest found at Keauhou Ranch, island of Hawaii, in April 1978.

Plant species	Abundance
Vascular plants	
<u>Metrosideros collina</u> (twigs)	+++
<u>Metrosideros collina</u> (aerial roots)	++
<u>Uncinia uncinata</u> (leaves)	++
Ferns and fern allies	
<u>Cibotium</u> sp. (rhizome)	+
<u>Cibotium glaucum</u> (hair and pulu)	+
<u>Cibotium glaucum</u> (pinnae)	++
<u>Dryopteris</u> sp. (pinnae)	++
Bryophytes	
<u>Macromitrium</u> sp. (moss)	++

+++Dominant components used in construction (n &gt; 30 pieces).

++ Nest material in low numbers (n = 10-30 pieces).

+ Nest material present only as traces (n &lt; 10 pieces).

## ACKNOWLEDGMENTS

C. John Ralph contributed invaluable suggestions and comments during all stages of this study. I appreciate the review of this manuscript by Andrew J. Berger, Sheila Conant, J. Michael Scott, John L. Sincock, Tim Burr, Roberta Burzynski, and Charles van Riper III. I thank Paul Higashino for identifying the plant materials in the nest.

## LITERATURE CITED

- Berger, A. J. 1981. Hawaiian birdlife. Second ed. Univ. Hawaii Press, Honolulu.
- Eddinger, C. R. 1970. A study of the breeding behavior of four species of Hawaiian honeycreeper (Drepanididae). Unpubl. Ph.D. dissertation, Univ. Hawaii, Honolulu.
- Henshaw, H. W. 1902. Birds of the Hawaiian possessions with notes on their habits. Thos. G. Thrum, Honolulu.
- Munro, G. C. 1944. Birds of Hawaii. Bridgeway Press, Rutland, VT.



- Pettingill, O. S. 1970. Ornithology in laboratory and field. Fourth ed. Burgess Publishing Co., Minneapolis, MN.
- Perkins, R. C. L. 1903. Vertebrata (Aves). In *Fauna Hawaiiensis* 1(4):368-465. D. Sharp, ed. Univ. Press, Cambridge, England.
- Scott, J. M., J. L. Sincock, and A. J. Berger. 1980. Records of nests, eggs, nestlings, and cavity nesting of endemic passerine birds in Hawaii. 'Elepaio 40:163-168.
- van Riper, C., III. 1973. The nesting of the Apapane in lava caves on the island of Hawaii. *Wilson Bull.* 85:238-240.
- van Riper, C., III, and J. M. Scott. 1979. Observations on distribution, diet, and breeding of the Hawaiian Thrush. *Condor* 81:65-71.

## Former Address:

*Institute of Pacific Island Forestry  
U.S. Department of Agriculture  
Forest Service  
1151 Punchbowl Street  
Honolulu, HI 96813*

## Current Address:

*Redwood Sciences Laboratory  
U.S.D.A. Forest Service  
1700 Bayview Drive  
Arcata, CA 95521*

## MORE ABOUT WAIKAMOI: SAVE AN ACRE OF MAUI

The following letter was received by Dr. Robert Pyle, president of the Hawaii Audubon Society from Alan Holt of The Nature Conservancy of Hawaii:

"The decision of the Hawaii Audubon Society Board of Directors to support our efforts on Maui comes as a great boost to all of us on the Conservancy staff. Not only has the Society made a significant monetary contribution which promises to be greatly bolstered by its members, but the leadership of the Board has added incredible momentum to the Waikamoi Save An Acre campaign and the Conservancy's program as a whole. Other local organizations have indicated a desire to support us as the habitat acquisition arm of Hawaii's conservation interests; this vote of confidence from H.A.S. can only help the formation of such an alliance. The 'Elepaio will



Maui forest habitat.

*Photo by Dave Boynton  
Courtesy of The Nature  
Conservancy*

reach many individuals who, in spreading the word that private action is working in Hawaii, will expand the positive effects of last week's decision. As I said at that meeting, this broadened base of grassroots support is precisely what we need to convince traditionally non-conservation foundations and corporations to donate large amounts of money to the protection of Hawaii's natural heritage.

"I look forward to a long and rewarding relationship between the Society and our organization as we work toward our common goals. I am especially interested in sharing information and ideas, and hope that your membership will see us as both a repository of information and an avenue for translation of knowledge into action.

"With deepest thanks for your support."

Last month, you were asked to join with the Hawaii Audubon Society Board and help raise \$300,000 needed to buy the perpetual



management rights on the proposed Waikamoi Preserve on the northwest slopes of Haleakala, Maui. You responded generously, and together we in the Hawaii Audubon Society have saved over 160 acres thus far. Others have helped too, and TNC has received over \$27,000 in small donations in the last month. Overall, TNC has in hand over one-third of the funds needed to acquire this fragile piece of wild Hawaii. This month we wanted to tell you a bit more about the little-known reaches of Waikamoi.

The proposed preserve is contained entirely within the boundaries of Haleakala Ranch on East Maui. Its 5230 acres stretch from Puu o Kakae and Hosmer's Grove on the northwest to just north of Hanakauhi and Kalapawili in the southeast. Most of the wedge-shaped preserve is between 5,000 and 8,000 feet in elevation. As you can see from the map, Waikamoi is nestled next to Haleakala National Park, significantly reducing the gap between the Park and the state's Ko'olau Forest Reserve to the north. By consolidating wild country in this way, TNC believes it will be easier to manage and protect all three wild areas. For instance, cooperative fencing projects to exclude feral pigs could follow the natural contours of the land rather than more expensive and difficult routes along property lines.

The proposed preserve protects four major native Hawaiian plant communities. In the lower elevations, ohia and koa-ohia forests dominate the landscape. Waikamoi includes the last significant piece of upper elevation koa forest on the west slope of Haleakala--all



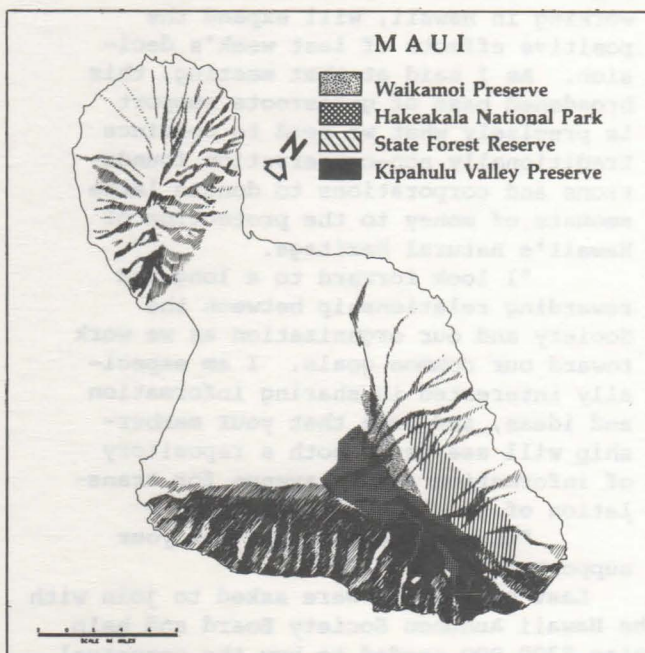
Crested Honeycreeper, Kipahulu Valley, Maui.

*Courtesy of The Nature Conservancy*

that remains of a belt of koa which once covered thousands of acres on the western and southern slopes of this mountain. Significant numbers of Maui Parrotbills find refuge in these remnant groves, and the Maui Nukupu'u has been seen here too. Sprightly Maui 'Akepas range in both the ohia and koa forests in the highest densities found in the state, and the colorful 'Akohekohe, or Crested Honeycreeper, sips nectar from the abundant ohialehua. Over one-third of the known range of the 'Akohekohe is within the proposed preserve. The Po'ouli, Hawaii's most recently discovered honeycreeper, has not been seen in Waikamoi, but its known range is close by and many hope it will be found here as well. By protecting the forest, the Waikamoi Preserve would help protect all of these beautiful and rare honeycreepers, as well as more numerous Hawaiian forest birds such as the Maui Creeper, Pueo, 'Apapane, 'Amakihi, and 'I'iwi.

In the upper reaches of the proposed preserve, starkly beautiful alpine and sub-alpine ecosystems are found, including part of the only intact alpine grassland remaining in Hawaii. Here, the endangered 'Ua'u (Dark-rumped Petrel) returns from the sea to dig burrows and raise its young, and the Nene grazes amidst ancient lava flows. Here, the silverswords reach for the sun. And from the crest, Hawaii's geologic past, present, and future are dramatically revealed in a panorama of cinder cones and lava flows, rushing streams and waterfalls, precipitous valleys and knife-edged ridges. Together they describe a mountain aging slowly and gracefully.

Many native Hawaiian plants have been found that are unique to the proposed Waikamoi





Preserve alone. The picture-wing fruitflies of the area have contributed significantly to genetic and evolutionary research. The biota of Waikamoi has been studied by scientists in Hawaii and throughout the world, including such famous names as R.C.L. Perkins, J.F. Rock, C.N. Forbes and J.L. Gressitt. Nevertheless, the area has not been thoroughly explored and inventoried, and exciting discoveries certainly lie ahead. But the spirit of any land is more than its scenery, its birds, its plants, its small, secretive insects and snails. The magic of Waikamoi cannot be captured in photos or in words. That is why it must survive-- a land that records the passage of time, a land growing and changing in response to its nature, a land independent of human will. We know so little. We can learn so much...but only if the area is actively protected from the destruction of feral animals and the invasion of exotic plants. It is not too late to help.

TNC must exercise its \$300,000 purchase option on Waikamoi by 25 August 1983. They also need approximately \$600,000 more to establish a perpetual endowment for Waikamoi, which will support the long-term management and protection work needed on the land.

Sixty dollars will save an acre, "...but the amount is not what is most important," Alan Holt explained. "The feeling that people really care and want to help as much as they can means a lot to us. It encourages us personally and strengthens our appeal for funds from charitable foundations."

Please use the envelope you received in the last issue of 'Elepaio or mail your contributions to: WAIKAMOI SAVE-AN-ACRE (HAS), The Nature Conservancy of Hawaii, 1026 Nuuanu Ave., Suite 201, Honolulu, Hawaii 96817.

If you have any questions, call the TNC staff at (808) 537-4508. And to those who have already given, our warmest thanks for sharing our dream of a wild Hawaii.

*Audrey Newman*

## MANANA ISLAND MAY FIELD TRIP REPORT

Tens of thousands of nesting Sooty Terns covered the slopes of Manana Island last month, when thirty excited Audubon members and friends visited the state seabird sanctuary just off Makapuu Point on the 19th of May. It was a perfect time to visit the colony. Very few birds were still incubating eggs and most of the chicks were 3-6 weeks old. Some adults near the landing flew up to protest our arrival, but chicks at this age do not need to be constantly

brooded, so the effect of our presence on the island was probably slight.

Because the terns had nested on all paths up to the crater rim, we stayed on the beach, watching the adult terns display and the chicks beg. We also saw a few Brown Noddies nesting along the vertical wall separating the beach from the slope. One noddy was brooding a very young chick, but most were either still building nests or incubating. To everyone's delight, one Wedge-tailed Shearwater was seen in a burrow, and a few other shearwaters flew by offshore. However, most of these moaning birds were absent, out to sea building up fat reserves for egg-laying which begins in early June. Other exciting observations included three Red-tailed Tropicbirds circling above the island and tidepools containing an array of marine life.

The warm weather and gentle trades made the entire visit very pleasant. Our departure was slightly delayed due to a boat scheduling mix-up. However, even the wait was interesting. While we all sat anxiously on the dock, Stephen Webber of Bellingham, WA found a live nautilus in the shallow waters off the beach. Around 9:00 a.m. Wayne Ahuna and his friends came to our rescue and ferried us safely to Manana. We returned to Oahu about 1:00 in the afternoon--wet, tired, tanned and very happy.

There are still two more chances to visit Manana Island this summer. Each trip is limited to 30 people, so call the trip leader for reservations. Look for the article in this issue with details on the upcoming July trip.

*Audrey Newman*

## NATIONAL AUDUBON CONVENTION

An impressive array of speakers has been lined up for the society's national convention, August 28 - September 2, at Estes Park, Colorado. Two key congressional chairmen will speak: Senator Robert T. Stafford, Republican of Vermont, whose Committee on Environment and Public Works has jurisdiction over the Clean Air and Clean Water Acts, and Representative John B. Breaux, Democrat of Louisiana, chairman of the House Subcommittee on Fisheries, Wildlife Conservation and the Environment. Another speaker from the capital will be U.S. Forest Service Chief R. Max Peterson.



Wildlife will be stressed. Nathaniel P. Reed, who was Assistant Secretary of the Interior during the Nixon and Ford administrations, will moderate a panel on grizzly bear management. Roger Tory Peterson, father of modern techniques for field identification of birds, will talk about the evolution of birding field guides. And--in conformance with the convention theme, "Think Globally, Act Locally"--there will be speakers from other lands. One is to be Prof. Wangari Maathai, chair of the National Council of Women of Kenya, whose topic will be: The U.S. as Seen by the Developing Countries.

And, as in the past, there will be sessions aimed at helping chapter officers to carry out their functions more effectively and environmental activists to learn more about issues and techniques for influencing legislation and public opinion.

Ten pre- and post-convention trips are offered, ranging from backpacking to art and photography workshops, a bike tour, and rafting through a spectacular canyon. Time is growing short for ensuring a place on these trips. If you need further information, write or call National Audubon Convention, 4150 Darley Avenue #5, Boulder, Colorado 80303; (303) 499-0219.

### MANANA ISLAND FIELD TRIP

The third of four Manana (or Rabbit) Island field trips is scheduled for Saturday, 23 July.

Each trip is limited to 30 people, so call the trip leader early for reservations. The July trip leader is scheduled to be Stewart Fefer. Call Stewart or Peggy at 235-8290 for reservations; there are only 15 spaces available now for this trip.

There will also be a trip in August, which will be announced in a later issue.

We will meet at the Makai Pier, just north of Sea Life Park at 7:30 a.m. and return around 1 or 2 in the afternoon. The boat ride will cost each person \$5.00, so please bring the exact amount in cash to pay the boat-pilot. Also, be prepared to get totally wet!! Seal your camera gear, binoculars, and other valuables in double plastic bags or other waterproof containers. Also, please wear tennis shoes or tabis; a jump from the boat without adequate footwear can provide a painful introduction to sea urchins.

### JULY PROGRAM: AVIFAUNA OF NEW ZEALAND

The program for the Monday, 18 July, general meeting will be a presentation by Mark Rauzon on *Avifauna of New Zealand and the Effects of Introduced Animals*.

Mark has recently returned from two months of studying the birds of New Zealand. He is currently working towards a degree in biogeography at the University of Hawaii. He has previously done research on the feral cats of Jarvis Island, and is presently studying possible effects of cat predation on the threatened Newell's Shearwater on Kauai for The Nature Conservancy.

The meeting will be held at McCully-Moiliili Library at 2211 S. King St., Honolulu, at 7:30 p.m.

The program promises to be interesting as well as informative.

### JULY FIELD TRIP MT. KAALA

The field trip on 10 July, Sunday, will go to Mt. Kaala on Oahu. The walk will involve lots of mud and frequent awkward footing, although it is a level area. Native forest birds will be encountered, as well as more familiar introduced birds.

Persons who wish to go on the trip MUST CALL THE LEADER TO GET ON THE LIST. People who can bring 4-wheel drive vehicles will be given priority. In case of inclement weather, a trip to waterbird habitat in Haleiwa will be substituted. All participants on the bird walk should bring rubber boots, tabis or sneakers, raingear, long pants, lunch, water and binoculars. Only 25 people will be allowed on the walk, so call the leader, Timothy Burr at 254-3905 between the evening hours of 6 to 8 p.m. to get on the list. Participants will meet at the State Library on Punchbowl St. at 6:30 a.m.

### REPRINTS OF ARTICLES

Reprints of articles in the 'Elepaio are available to authors and others at the following rate if ordered before publication date: for 100 copies, \$10 per page of the article. For each additional 100 copies, add \$3 per page.



## WAIMEA FALLS PARK EXHIBITION

The Waimea Arboretum Foundation will hold its Annual Plant Sale and Exhibition on the grounds of Waimea Falls Park from 10 a.m. to 4 p.m. Saturday and Sunday, July 9 and 10, featuring plant and plant-related crafts sales, displays of flowers and plants and educational exhibits.

Special lecture Saturday at 9 a.m. by Keith Woolliams, director of the Waimea Arboretum & Botanical Garden called "The Inside Story of Waimea Arboretum." For information, call 638-8655.

*(Editor's note: If anyone is interested in helping with the Hawaii Audubon Society display booth, please call Bob Pyle at 262-4046.)*

## HELP WITH 'ELEPAIO

The August issue of 'Elepaio will be pasted-up on July 14 (Thurs.). If you would like to help, call Peter at 847-3511 (ext. 156) or Marie at 533-7530 for location. No experience necessary! Everyone welcome to help!

## IF NOT A MEMBER, PLEASE JOIN US

## JOINT MEMBERSHIP

(National and Hawaii Audubon Societies)

Individual.....	\$ 25.00
Family.....	32.00
Sustaining.....	50.00
Supporting.....	100.00
Contributing.....	250.00
Donor.....	500.00
Life (single payment).....	1500.00
Dual Life (single payment).....	2000.00

*Special rates for full-time students and Senior Citizens (65 years of age or older) are available. Please write for application form.*

## LOCAL MEMBERSHIP

(Hawaii Audubon Society Only)

Regular.....	\$ 6.00
Junior (18 and under).....	3.00
Subscriber (non-Hawaii residents).....	6.00
Life.....	150.00
(payable in three equal annual installments)	

New members who send in dues between January and September will receive, if they request them, all back issues of the 'Elepaio for that year. After September, the dues are counted for the following year.

## HAWAII AUDUBON SOCIETY

## BOARD OF DIRECTORS

President	Dr. Robert L. Pyle	262-4046
1st V.P.	Dr. Wayne Gagné	941-5659
2nd V.P.	Dr. Charles Lamoureux	948-8028
Treasurer	Norris Henthorne	734-7562
Rec. Secy.	Suzan Harada	845-6704
Cor. Secy.	Thea Johanos	946-2181
Directors:	Patricia Avery	988-7622
	Phillip Bruner	293-3806
	George Campbell	941-1356
	Erma Ikawa-Nicola	967-7367
	Marie Morin	533-7530
	Marion Saunders	988-2635

## COMMITTEES

Conservation	Dr. Charles Lamoureux	988-2255
Education	Patricia Avery	537-9564
'Elepaio	Peter Galloway	847-3511
	Marie Morin	533-7530
Field Trips	Peter Donaldson	456-5662
Finance	Norris Henthorne	734-7562
Mail Distrib.	Leilani Pyle	262-4046
Membership	Dr. Robert Pyle	262-4046
	Susan Schenck	488-4974
	Kammy Wong	
Programs	Phillip Bruner	293-3806
Publicity	(Vacant)	
Sales	George Campbell	941-1356
	Richard Smith	262-4784
Scholarships	Dr. Sheila Conant	948-8241
Special Pub.	Dr. Rob. Shallenberger	261-3741

## 'ELEPAIO

Editors.....	Marie Morin, Peter Galloway
	(Send articles to Marie Morin, 1415 Victoria St. #1515, Honolulu, Hawaii 96822)
Production Committee.....	Anne Conibear, Kathy Harrington, Audrey Newman, and Joel Simasko.

## VOLUNTEERS NEEDED

---A volunteer is needed to fill and mail occasional orders for back issues of 'Elepaio. Most back issues are kept at the Bishop Museum, but the extras of recent issues could be kept at home. Call Dick Smith (262-4784) or Bob Pyle (262-4046).

---Volunteers are always needed to assist with proofreading, typing, or writing for the 'Elepaio. A volunteer is especially needed to compile a five-year index from the yearly indices. Call Marie (533-7530).



### CALENDAR OF EVENTS

- July 10 (Sun.) Field trip to Mt. Kaala, Oahu. See page 8. Leader Tim Burr (254-3905).
- July 11 (Mon.) Board meeting at 7 p.m. at Moanalua Gardens, 1352 Pineapple Pl. Call Suzan Harada (839-5334) for details.
- July 18 (Mon.) General meeting featuring Mark Rauzon. 7:30 p.m., McCully-Moiliili Library, 2211 S. King St., Honolulu.
- July 23 (Sat.) Field trip to Manana Seabird Island, Oahu. Call Stewart or Peggy (235-8290). See page 8.

Reprinting of material from the 'Elepaio is permitted if credited to the " 'Elepaio, the journal of the Hawaii Audubon Society".

HAWAII AUDUBON SOCIETY  
P. O. Box 22832  
HONOLULU, HAWAII 96822

### TABLE OF CONTENTS

Vol. 44, No. 1, July 1983

The Correct Name for the Hawaiian Crow Richard C. Banks.....	1
The Diversity of Nesting Sites Utilized by the 'Apapane Howard F. Sakai.....	2
More About Waikamoi: Save an Acre of Maui Audrey Newman.....	5
Manana Island May Field Trip Report Audrey Newman.....	7

Non Profit Organization  
U. S. POSTAGE  
**PAID**  
Honolulu, Hawaii  
Permit No. 1156

